NAME _____   MEET 3 PYTHAGOREAN DIVISION JAN. 8, 1998

GRADE 9
30 MINUTES
ANSWER COLUMN

DIRECTIONS: Place your answer to each question below in the answer column.

1) If $\frac{1}{5}$ of a number is $\frac{1}{4}$, what is $\frac{1}{4}$ of the number?

1) _____

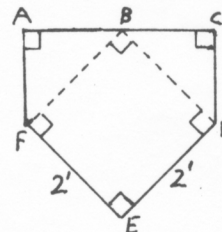2) If $\boxed{x} = \sqrt{x}$, $\triangle x = \frac{1}{3}x + 1$ and $\bigcirc x = x^2 + x$,

express $\bigcirc\triangle\boxed{36}$ in simplest form.

2) _____

3) Express $\sqrt{(495)(497) + 1}$ in simplest form.

3) _____

4) Find the area if EFBD is a square and
    △ABF and △BCD are isosceles.

4) _____

5) The square of the sum of two numbers exceeds the square of their
    difference by 12. Find the product of the two numbers.

5) _____

6) Find a 6-digit number, all of whose digits are different, that has
    the property that when it is multiplied by 1, 2, 3, 4, 5, or 6, the
    resultant product contains the same set of digits. To find that
    number, divide the number 1 by the smallest whole number that has a
    six-digit repeating decimal.

6) _____